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**2008 Significant Changes to the NEC, Part II - Supplemental**  
Course Syllabus & Outline

**Course Details:**

**CEU Credits:** 8

**Contact Hours:** 8

**Course Type:** Code Update

**Required Textbook:** 2008 NEC Code Book

**Class Format/Location:** Web-based course delivered on-line @ [www.bluevolt.com](http://www.bluevolt.com)

**Prerequisite:** 2008 Significant Changes to the NEC–Part I. Current or reciprocal state electrical license.

**Instructor:** Palmer Hickman

**Course Description:**

Every electrical license holder must complete continuing education training in code changes. In general, continuing education in code changes shall be obtained no later than 12 months following the code adoption date set by the state electrical board. This section covers over 300 of the most significant 2008 NEC Code Changes. Specific articles covered are listed in the course outline below.

**Course Learning Objectives:**

1. Introduce students to the significant changes in the 2008 NEC Code
2. Provide students with a code change summary, type of change, the new 2008 code, significance of change with corresponding visual aid.

**Student Learning Outcomes:**

At the conclusion of this course, each student will be able to:

- \*Find code sections in the 2008 NEC that have been changed
- \*Explain why certain 2008 NEC changes were made
- \*Apply the 2008 NEC changes to workplace situations
- \*Identify applications and implement 2008 NEC Changes

**Evaluation/Grading:** Pass/No Pass. Participants will have the opportunity to receive feedback on their progress in meeting the student learning outcomes at 9 points in the course:

- 1) Chapter 1 Quiz (optional)
- 2) Chapter 2 Quiz (optional)
- 3) Chapter 3 Quiz (optional)
- 4) Chapter 4 Quiz (optional)
- 5) Chapter 5 Quiz (optional)
- 6) Chapter 6 Quiz (optional)
- 7) Chapter 7 Quiz (optional)
- 8) Chapter 8 Quiz (optional)
- 9) Comprehensive Final Exam (must pass with 70%) or better (required)

**Course Outline:****Introduction & Chapter 1      1 hour**

<b>Chapter</b>	<b>Article / Section</b>	<b>Title</b>
<b>Chapter 1</b>	90.2	Scope
	Article 100	Definition of Bonded (Bonding)
	Article 100	Definition of Clothes Closet
	Article 100	Definition of Device
	Article 100	Definition of Electric Power Production and Distribution Network
	Article 100	Definition of Equipment
	Article 100	Definition of Grounded (Grounding)
	Article 100	Definition of Grounding Conductor, Equipment (EGC)
	Article 100	Definition of Grounding Electrode Conductor
	Article 100	Definition of Intersystem Bonding Termination
	Article 100	Definition of Kitchen
	Article 100	Definition of Luminaire
	Article 100	Definition of Metal-Enclosed Power Switchgear
	Article 100	Definition of Neutral Conductor and Neutral Point
	Article 100	Definition of Premises Wiring (System)
	Article 100	Definition of Qualified Person
	Article 100	Definition of Short-Circuit Current Rating
	Article 100	Definition of Surge Arrester and Surge Protective Device (SPD)
	Article 100	Definition of Utility-Interactive Inverter and Interactive System
	110.11	Deteriorating Agents
	110.12	Mechanical Execution of Work, (A) Unused Openings
	110.22	Identification of Disconnecting Means
	110.31(C)	Outdoor Installations
	110.33	Entrance to Enclosures and Access to Working Space

**Chapter 2      2 hours**

<b>Chapter</b>	<b>Article / Section</b>	<b>Title</b>
<b>Chapter 2</b>	210.25	Branch Circuits in Buildings with More Than One Occupancy

210.6(D)	600 Volts Between Conductors
210.60	Guest Rooms, Guest Suites, Dormitories, and Similar Occupancies
210.62	Show Windows
215.10	Ground-Fault Protection of Equipment
220.52	Small-Appliance and Laundry Loads— Dwelling Unit
225.18	Clearance for Overhead Conductors and Cables
225.39	Rating of Disconnect
230.40	Number of Service-Entrance Conductor Sets
230.53	Raceways to Drain
230.54	Overhead Service Locations
230.95	Ground-Fault Protection of Equipment
240.24(B)	Occupancy
240.4(D)	Small Conductors
240.86(A)	Selected Under Engineering Supervision in Existing Installations
250.104 (A)(2)	Buildings of Multiple Occupancy
250.112(I)	Remote-Control, Signaling, and Fire Alarm Circuits
250.119	Identification of Equipment Grounding Conductors
250.122(C)	Multiple Circuits
250.122(D)	Motor Circuits
250.166	Size of the Direct-Current Grounding Electrode Conductor
250.168	Direct-Current System Bonding Jumper
250.22	Circuits Not to be Grounded
250.28	Main Bonding Jumper and System Bonding Jumper
250.30(A)	Grounded Systems
250.30(A)(4)	Grounding Electrode Conductor, Multiple Separately Derived Systems
250.36	High-Impedance Grounded Neutral Systems
250.4(B)	Ungrounded Systems
250.54	Auxiliary Grounding Electrodes
250.56	Resistance of Rod, Pipe, and Plate Electrodes
250.64	Grounding Electrode Conductor Installation
250.64(F)	Installation to Electrode(S)

	250.68	Grounding Electrode Conductor and Bonding Jumper Connection to Grounding Electrodes
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**Chapter 3      1.5 hours**

Chapter	Article / Section	Title
<b>Chapter 3</b>	300.20(A)	Conductors Grouped Together
	300.22(C)	Other Spaces Used For Environmental Air
	300.5(D)	Protection From Damage
	300.7(B)	Expansion Fittings
	310.4	Conductors In Parallel
	314.27	Outlet Boxes
	314.28(A)	Minimum Size
	314.30	Handhole Enclosures
	320.10	Uses Permitted
	336.10	Uses Permitted
	338.12	Uses Not Permitted
	350.30	Securing and Supporting
	352.10(F)	Exposed
	366.2	Definitions
	388.30 and 388.56	Securing and Supporting and Splices and Taps
	392.3(A)	Wiring Methods
	392.9	Number of Multiconductor Cables, Rated 2000 Volts or Less, in Cable Trays
	3XX.12	Uses Not Permitted
	Article 352	Rigid Polyvinyl Chloride Conduit: Type PVC
	Article 353	High-Density Polyethylene Conduit: Type Hdpe Conduit
	Article 382	Nonmetallic Extensions

**Chapter 4      .75 hours**

Chapter	Article / Section	Title
<b>Chapter 4</b>	409.2	Definition of Industrial Control Panel
	410.141(B)	Within Sight or Locked Type
	411.2	Definition of Lighting Systems Operating at 30 Volts or Less
	411.3	Listing Required
	411.4	Specific Location Requirements
	422.51	Cord-and-Plug-Connected Vending Machines
	424.19	Disconnecting Means
	427.13	Identification
	430.102(B)	Motor
	430.110(A) and 440.12	General
	430.126	Motor Overtemperature Protection

	430.227	Disconnecting Means
	430.32(C)	Selection of Overload Device
	430.73 and 430.74	Protection of Conductor From Physical Damage
	445.18	Disconnecting Means Required For Generators
	490.44 and 490.46	Fused Interrupter Switches

**Chapter 5      1 hour**

Chapter	Article / Section	Title
<b>Chapter 5</b>	500.1	Scope—Articles 500 Through 504
	500.7(K)	Combustible Gas Detection System
	501.30(B)	Types of Equipment Grounding Conductors
	502.115(A)	Class II, Division 1
	502.120	Control Transformers and Resistors
	502.130 (B)(2)	Fixed Lighting
	502.150(B)	Class II, Division 2
	517.13(B)	Insulated Equipment Grounding Conductor
	517.160 (A)(5)	Conductor Identification
	517.2	Definition of Patient Care Area
	517.40(B)	Inpatient Hospital Care Facilities
	517.80	Patient Care Areas
	518.4(A)	General
	518.5	Supply
	520.2 and 520.27(B)	Definitions
	525.5, 525.6, 525.11, 525.21, and 525.30	
	547.2, 547.3, and 547.9	
	547.9(B)(3)	Grounding and Bonding
	550.33(A)	Feeder Conductors
	551.4	General Requirements
	590.4(D)	Receptacles
	590.6	Ground-Fault Protection for Personnel

**Chapter 6      1 hour**

Chapter	Article / Section	Title
<b>Chapter 6</b>	600.2 and 600.4(C )	Definition of Section Signs
	600.6	Disconnects
	600.7	Grounding and Bonding
	604.2 and 604.6(A)(4)	Definition of Manufactured Wiring System and Busways
	640.6	Mechanical Execution of Work
	645.10	Disconnecting Means

	645.5(F) and 645.5(G)	Abandoned Supply Circuits and Interconnecting Cables
	680.10	Underground Wiring Location
	680.2	Definitions
	680.21(A)	Wiring Methods
	680.23(A)(6) and 680.51(C)	Bottom-Lined Luminaires and Luminaire Lenses
	680.23(B)	Wet-Niche Luminaires
	680.25(A)	Wiring Methods
	680.31	Pumps
	680.43(D)	Bonding
	680.50	General
	682.13	Wiring Methods and Installation
	682.30	Grounding
	690.10	Stand-Alone Systems
	690.31	Methods Permitted
	690.33	Connectors
	690.43	Equipment Grounding
	690.45	Size of Equipment-Grounding Conductor
	690.5	Ground-Fault Protection
	692.41	System Grounding
	695.6(B)	Circuit Conductors
	Article 680	Receptacle Locations, Parts II, III, IV, VI, and VII
	Article 690	Solar Photovoltaic Systems

**Chapter 7 .5 hours**

Chapter	Article / Section	Title
<b>Chapter 7</b>	700.12(B)(6), 701.11(B)(5), and 702.11	Generator Disconnecting Means Located Outdoors
	700.9(D)	Fire Protection
	725.3(B)	Spread of Fire or Products of Combustion
	Article 705	Interconnected Electric Power Production Sources
	Chapters 7 and 8	Abandoned Cables

**Chapter 8 .25 hours**

Chapter	Article / Section	Title
<b>Chapter 8</b>	800.1 and 800.2	Scope and Definitions
	800.156	Dwelling Unit Communications Outlet
	800.48	Unlisted Cables Entering Buildings
	820.15 and 830.15	Power Limitations
	Chapters 7 and 8	Abandoned Cables